

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Spring 2017 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0016

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2017 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0016

Waterway			Bank	Unit Miles
Unit No. 01 Feather River			Right	4.06
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/23/2017 - 3/23/2017			
DWR Inspector	Sterling York			
Accompanied By	Shawn Freitag Sutter Maintenance Yard			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	03/23/2017 03/23/2017	Sterling York

LM Start		Rating **	A	Issue No.	3
LM End		Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_MA0016_01_s_2013_3				
Comment Code					
Inspector Comment					
SBFCA has turned over to MA 0016. The O&M manuals are located at the Sutter Maintenance Yard.					

No Photos

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_MA0016_01_s_2013_4				
Comment Code					
Inspector Comment					
Sutter maintenance yard employees attend the annual Flood Fight class put on by DWR inspector Bob Duffy.					

No Photos

LM Start		Rating **	A	Issue No.	5
LM End		Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_MA0016_01_s_2013_5				
Comment Code					
Inspector Comment					
Emergency supplies and equipment are stored at the Sutter Maintenance Yard.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	03/23/2017 03/23/2017	Sterling York

LM Start	0.06	Rating **	M	Issue No.	2
LM End	0.10	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.256618 °	39.257228 °
				-121.636442 °	-121.636462 °
DWR ID	DWR_MA0016_01_s _ 2012_2				
Comment Code					
V6 : Landscaping					
Inspector Comment					

Photo 1 of 1 : SP_2017_MA0016_302_2_20170316_00001.jpg



This photo shows the landscaping on the landside slope and toe.

LM Start	0.18	Rating **	M	Issue No.	15
LM End	0.18	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.258437 °	39.258437 °
				-121.636613 °	-121.636613 °
DWR ID	DWR_MA0016_01_s _ 2012_15				
Comment Code					
BU : Building					
Inspector Comment					

Photo 1 of 1 : SP_2017_MA0016_302_15_20170316_00008.jpg



Levee mile 0.18. This photo shows the building on the landside shoulder and toe.

LM Start	0.44	Rating **	A/W	Issue No.	7
LM End	0.49	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.262213 °	39.262825 °
				-121.636545 °	-121.636430 °
DWR ID	DWR_MA0016_01_s _ 2012_7				
Comment Code					
BU : Building					
Inspector Comment					
Landscape & fence has been removed and house is 13' from levee toe.					

Photo 1 of 2 : SP_2017_MA0016_302_7_20170327_00013.jpg



View of the removed landscaping, fence, and the portion of the house that was encroaching the right-of-way. Spring 2017.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	03/23/2017 03/23/2017	Sterling York

LM Start	0.44	Rating **	A/W	Issue No.	7 (cont)	
LM End	0.49	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			39.262213 °		39.262825 °
				-121.636545 °		-121.636430 °
DWR ID	DWR_MA0016_01_s_2012_7					
Comment Code						
BU : Building						
Inspector Comment						
Landscape & fence has been removed and house is 13' from levee toe.						

Photo 2 of 2 : SP_2017_MA0016_302_7_20170316_00002.jpg



Levee mile 0.49. This photo shows the building and landscaping on the landside slope and toe, Fall 2016.

LM Start	2.85	Rating **	M	Issue No.	14
LM End	3.08	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.293675 °	39.296748 °
				-121.636615 °	-121.638192 °
DWR ID	DWR_MA0016_01_s_2012_14				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP_2017_MA0016_302_14_20170316_00007.jpg



Agricultural ditch land side slope and toe.

LM Start	3.19	Rating **	A/W	Issue No.	10
LM End	3.65	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.298312 °	39.305053 °
				-121.638327 °	-121.637729 °
DWR ID	DWR_MA0016_01_f_2016_10				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Annual grasses are maintained.					

Photo 1 of 1 : SP_2017_MA0016_302_10_20170327_00014.jpg

View looking upstream, landside, of annual grasses that are maintained.
Spring 2017.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	03/23/2017 03/23/2017	Sterling York

LM Start	3.19	Rating **	A/W	Issue No.	9
LM End	3.81	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.298312 °	39.307293 °
				-121.638328 °	-121.637671 °
DWR ID	DWR_MA0016_01_f_2016_9				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Annual grasses are maintained.					

Photo 1 of 1 : SP_2017_MA0016_302_9_20170327_00015.jpg



View looking upstream, waterside, of annual grasses that are maintained. Spring 2017.

LM Start	3.27	Rating **	M	Issue No.	11
LM End	3.27	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.299502 °	39.299502 °
				-121.638326 °	-121.638326 °
DWR ID	DWR_MA0016_01_s_2016_11				
Comment Code					
PR : Prunings					
Inspector Comment					
Logs still on levee crown, waterside, as of 2016 fall inspection.					

Photo 1 of 1 : SP_2017_MA0016_302_11_20170316_00006.jpg



Large pruning on waterside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	03/23/2017 03/23/2017	Sterling York

LM Start	3.39	Rating **	M	Issue No.	16
LM End	3.39	Issue Type +	Ma	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.301218 °	39.301218 °	
			-121.638332 °	-121.638332 °	

DWR ID	
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Comment Code

Inspector Comment

FS_ID:51157
DS_ID:17125
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: 12/1/2016 LS inlet completely buried. (DWR Sutter Yard- A Freitag) 5/26/2016 LS inlet was completely buried. 6/8/2015 Concrete headwall is still cracked and inlet is buried. It was said to be replaced with the SBFCA project but the project skipped over in this area. 12/29/2014 Same as last inspection. 5/19/2014 Same as last inspection. 11/6/2013 Same as last inspection. 5/14/2013 SBFCA project recommends replacing in accordance with title 23. Same as last inspection. 12/11/2012 Concrete headwall on LS toe is cracked through middle and pipe is buried in soil. pipe appears corroded.
FIELD_STRUCT_DESC: 1 of 2: 24-inch corrugated metal drainage pipe through the levee, 16.6 feet below the crown. Concrete headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 148, August 1955 (Station 646+96)].
FS Date: 12/2/2016 10:08:55 AM

LM Start	3.39	Rating **	M	Issue No.	16 (cont)
LM End	3.39	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : UCIP_SP_2017_51157_65782.jpg



Headwall at LS toe is cracked and the inlet is buried in soil.

Photo 2 of 2 : UCIP_SP_2017_51157_65781.jpg



Headwall on WS toe with flap gates.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	03/23/2017 03/23/2017	Sterling York

LM Start	3.39	Rating **	M	Issue No.	17
LM End	3.39	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.301218 °	39.301218 °
				-121.638332 °	-121.638332 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51158 DS_ID:17183 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 12/1/2016 LS inlet is completely buried. (DWR Sutter Yard- A Freitag)5/26/2016 LS inlet was completely buried.6/8/2015 Concrete headwall is still cracked and inlet is buried. It was said to be replaced with the SBFCA project but the project skipped over in this area.12/29/2014 Same as last inspection.5/19/2014 Same as last inspection.11/6/2013 Same as last inspection.5/14/2013 SBFCA project recommends replacing in accordance with title 23. Same as last inspection.12/11/2012 Pipe burried on LS toe and should be inspected along with adjacent 24-inch once uncovered. FIELD_STRUCT_DESC: 2 of 2: 24-inch corrugated metal drainage pipe through the levee, 16.6 feet below the crown. Headwalls at both the waterside (WS) and landside (LS) ends and a flap gate on the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 148, August 1955 (Station 646+96)]. FS Date: 12/2/2016 10:09:48 AM					

LM Start	3.39	Rating **	M	Issue No.	17 (cont)
LM End	3.39	Issue Type +	En	Location *	WS

Photo 1 of 2 : UCIP_SP_2017_51158_65780.jpg



Pipe should be located on either side of the one visible in this picture.

Photo 2 of 2 : UCIP_SP_2017_51158_65779.jpg



Headwall and flap gate on WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0016

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	4.06	03/23/2017 03/23/2017	Sterling York

LM Start	3.90	Rating **	C	Issue No.	8
LM End	4.04	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.308616 °	39.310697 °
				-121.637674 °	-121.637691 °
DWR ID	DWR_MA0016_01_f_2016_8				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Tree limbs are no longer an issue because the trees have been cut down. Spring 2017.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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